**T.C. MALTEPE UNIVERSITY FACULTY OF MEDICINE**

**PHASE V LICENCE PROGRAM**

**2023-2024 ACADEMIC YEAR**

| **Course Name: Neurosurgery Clerkship**  | **Course Code: MED 509**  |
| --- | --- |
| ECTS: 3  | Phase V  | Undergraduate  | Compulsory  |
| 60 hours / 2 weeks  | Theoretical: 30 hours /2 weeks Practices: 30 hours / 2 weeks  | Course language:  English  |
| **Course Coordinator, Contact Details and Office Hours:** Bilal KELTEN M.D., Professor, Maltepe University, Faculty of Medicine opdrbilalkelten@yahoo.com Extension: 2121 **Office Hours:** Thursday: 14:00-15:00  |
| **Instructors, Contact Details and Office Hours:** Bilal KELTEN M.D., Professor, Maltepe University, Faculty of Medicine opdrbilalkelten@yahoo.com Extension: 2130 **Office Hours:** Thursday: 14:00-15:00  |

**Objectives of the Course**:

Neurosurgical causes of disease, examination techniques, diagnostic methods and indications for medical and surgical approach to teach

**Learning Outcomes and Subordinate Skills:**

After finishing this course the students will be able

1. To recognize the signs of intracranial space-occupying lesions and take the necessary urgent measures. To provide first aid and safe transport in head and spinal cord injury patients.
2. To be able to diagnosis and treatment of congenital abnormalities of the central nervous system to steer.
3. To identify brain hemorrhage and able to transfer the patient to take emergency measures.
4. Be able to diagnose diseases of the spine and spinal cord, and learn simple conservative treatments.

**COURSE LEARNING OUTCOMES, SUB-SKILLS AND COMPETENCIES**

| **Students who complete this course;**

|  **No.** | **Learning Outcome / Sub-Skill / Competencies** | **Education Method** | **ME Method** |
| --- | --- | --- | --- |
| **1** | Able to take a surgical history using communication skills | EY4, EY5 | ME7 |
| **2** | Able to evaluate the patient by performing a General Surgery examination. | EY4, EY5 | ME7 |
| **3** | Able to request appropriate laboratory examinations | EY4, EY5 | ME7 |
| **4** | Able to inform patients and their relatives about the treatment plan, and refer them to the appropriate center when necessary. | EY4, EY5 | ME7 |
| **5** | The principles of rational drug use should be known. | EY4, EY5 | ME7 |

 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

**General Competencies:**

1. Productive
2. Rational
3. Questioning
4. Entrepreneur
5. Creative
6. Compliance with the Code of Ethics
7. Respect differences
8. Social awareness
9. Effective use of native language
10. Environmental sensitivity
11. Effective use of a foreign language
12. Adapt to different situations and social roles
13. Work in teams
14. Use time effectively
15. Critical thinking

**Teaching Methods and Techniques:**

Narrative

Preparation of the file and / or presentation

Application

**Mode of Delivery:**

Face-to-face and E-Learning

**Practice (course) Institution:**

Classrooms, operating rooms, patient rooms, emergency rooms, outpatient clinics.

**Pre-requisite:**

Be successfully completed in the previous period

**Co-term condition:**

no

**Recommended additional courses:**

no

**Course contents:**

1. Intracranial tumors
2. Cerebrovascular Diseases
3. Head trauma
4. ICP-herniation syndromes
5. Pediatric neurosurgery
6. Disc herniation
7. Spinaltravmalar
8. Spinal tumors
9. Entrapment neuropathies - peripheral nerve surgery

**Course Categories:**

| 1. Basic vocational courses  | x  |
| --- | --- |
| 2. Expertise / field courses  |   |
| 3. Support classes  |   |
| 4. Transferable Skills Courses  |   |
| 5. Humanities, Communication and Management Skills Courses  |   |

**Textbook:**

Basic Neurosurgery,

**Supplementary Books:**

Handbook of Neurosurgery, Sixth Edition.

**Evaluation System**

| **Studies during the year**  | **Number**  | **Percent grade**  |
| --- | --- | --- |
| **Attendance**  | 2 weeks  | -  |
| **Laboratory**  | -  | -  |
| **Practice**  | -  | -  |
| **Field study**  | -  | -  |
| **Lesson specific internship** (if there is)  | -  | -  |
| **Homework**  | -  | -  |
| **Presentation**  | -  | -  |
| **Project**  | -  | -  |
| **Seminar**  | -  | -  |
| **Clerkship Examination (written+oral)**  | 1  | **100**  |
| **Total**  |  | **100**  |

**ETCS Student Workload Table**

| **Activities**  | **Number**  | **Duration (hours)**  | **Total work load**  |
| --- | --- | --- | --- |
| **Lectures**  | **30**  | **1**  | **30**  |
| **Laboratory**  | **-**  | **-**  | **-**  |
| **Practice**  | **30**  | **1**  | **30**  |
| **Lesson specific internship** (if there is)  | **-**  | **-**  | **-**  |
| **Field study**  | **-**  | **-**  | **-**  |
| **Lesson study time out of class** (pre work, strengthen, etc)  | **-**  | **-**  | **-**  |
| **Presentation / Preparing seminar**  | **1**  | **2**  | **2**  |
| **Project**  | **-**  | **-**  | **-**  |
| **Homework**  | **-**  | **-**  | **-**  |
| **Midterm examinations**  | **-**  | **-**  | **-**  |
| **Clerkship Examination**   | **1**  | **8**  | **8**  |
| **Total work load**  |  |  | **70**  |

**Relationship Between Neurosurgery Clerkship Learning Outcomes and MEDICAL EDUCATION Programme Key Learning Outcomes**

| **No**  | **Program Competencies / Outcomes**  | **Contribution level**[[1]](#footnote-0) |  |
| --- | --- | --- | --- |
| **1**  | **2**  | **3**  | **4**  | **5**  |
| **1**  | To be able to describe the normal structure and function of the organism.   |  | **X**  |  |  |  |
| **2**  | To be able to explain the pathogenesis of diseases and clinical and diagnostic characteristics.  |  |  | **X**  |  |  |
| **3**  | To be able to bbtain the patient's history and make the system based neurological physical examination.  |  |  |  |  | **X**  |
| **4**  | To treat life-threatening emergency diseases and provide patient transport  |  |  |  |  | **X**  |
| **5**  | To be able to apply basic medical interventionsfor diagnosis and treatment of diseases.  |  |  |  |  | **X**  |
| **6**  | To achieve preventive medicine and forensic applications.   |  |  | **X**  |  |  |
| **7**  | To achieve general information about the structure and functioning of the National Health System.  |  |  | **X**  |  |  |
| **8**  | to define legal responsibilities and ethical principles.   |  | **X**  |  |  |  |
| **9**  | to treat common diseases in the community with highly effective and scientific data and methods  |  | **X**  |  |  |  |
| **10**  | To organize and carry out scientific meetings and projects.  |  | **X**  |  |  |  |
| **11**  | To know a foreign language to follow the literature for update their knowledge of medicine. To use statistical and computer methods to assess the extent of scientific studies.  |  | **X**  |  |  |  |

**PHASE 6 MED 608 GENERAL SURGERY INTERNSHIP COURSE LIST AND RANKING**

| **No.** | **Subject/Competence** | **Instructor** |
| --- | --- | --- |
| 1 | Vascular Diseases | Prof. Dr. Bilal KELTEN |
| 2 | Pedatric Neurosurgery | Prof. Dr. Bilal KELTEN |
| 3 | Aim of Neurosurgery | Prof. Dr. Bilal KELTEN |
| 4 | Brain Tumors | Prof. Dr. Bilal KELTEN |
| 5 | Head İnjuries | Prof. Dr. Bilal KELTEN |
| 6 | Disc Hernias | Prof. Dr. Bilal KELTEN |
| 7 | İncreased İntracranial Pressure Syndrome | Prof. Dr. Bilal KELTEN |
| 8 | Spine Trauma | Prof. Dr. Bilal KELTEN |

| **EDUCATIONAL METHODS GUIDE** |
| --- |
|

| **CODE** | **METHOD NAME** | **EXPLANATION** |
| --- | --- | --- |
| **EM1** | Amphitheatre lesson | These are the courses applied in preclinical education where the whole class is together. |
| **EM2** | Class lesson | These are courses applied in small groups during the clinical period. |
| **EM3** | Lab application | These are laboratory courses applied in the preclinical period. |
| **EM4** | Skill Training App | It is the work that the student does on a model or mannequin before meeting with the real patient, which will be done in the Virtual Clinic or other environment. |
| **EM5** | Clinic Education | These are activities that provide clinical competence by applying bedside training with real patients or models under the supervision of trainers. |
| **EM6** | Independent Study Hours | These are the periods in the curriculum for the student to repeat what they have learned and to prepare for new lesson sessions. |
| **EM7** | Community Based Education Application | Field practices, non-unit professional practices, etc. includes. |
| **EM8** | Problem Based Learning | Problem based learning. |
| **EM9** | Private Study module | These are applications that will enable the student to gain in-depth knowledge about a subject individually or as a group. |
| **EM10** | Scientific Research study | These are applications aimed at improving the scientific research competence of the student. |
| **EM11** | Other | If this code is used, the training method should be written in detail. |

 |

| **MEASUREMENT EVALUATION METHODS GUIDE** |
| --- |
|

| **CODE** | **METHOD NAME** | **EXPLANATION** |
| --- | --- | --- |
|  **ME1** | Theoretical Exam ( Multiple Elective , Multiple Optional etc Questions containing ) | The committee is the exam used in the final exams. |
|  **ME2** | Practical exam | It should be used for laboratory applications. |
| **ME3** | Classical Verbal |  |
| **ME4** | Structured Oral | It is an oral exam in which questions and answers are prepared on a form beforehand. |
| **ME5** | OSCE | Objective Structured Clinical Examination |
| **ME6** | CORE | Clinical Act Execution Exam |
| **ME7** | ICE ( Business head Evaluation ) | It is the evaluation made by the trainer on the student at the bedside or during the practice. |
| **ME8** | Other | A statement must be made. |

 |

1. 1 the lowest, 2 low, 3 medium, 4 high, 5 is the highest shall be identified.

 [↑](#footnote-ref-0)